SECTION 09680 - CARPETING (WOVEN W/SEPARATE UNDERLAYMENT)

PART 1 - GENERAL

1.01 GENERAL CONDITIONS

As specified in Section 00700.

1.02 SUBMITTALS

A. <u>Samples</u>:

- Within 15 calendar days after award of the Contract, the Contractor shall submit to the Engineer 2 samples each (minimum 3 in. x 5 in.) of the pad and carpet he proposes to furnish.
- 2. At the same time, he shall also submit to the Engineer one set of carpet samples of the manufacturer's standard colors. The manufacturer, carpet designation, and color designation shall be indicated on the back of each sample. After receiving notification of the color selection, the Contractor shall submit to the Engineer 3 samples of carpet of the selected color(s).

B. <u>Certification</u>:

- The Contractor shall certify in writing that the carpet as proposed meets or exceeds the requirements of these specifications. He shall also submit the manufacturer's complete specifications covering the construction of the proposed carpet.
- The contractor shall also submit a written certificate of wood treatment for the tackless strips.

C. Installation Drawings - Layout:

1. Together with the samples in Subsection A above, the Contractor shall submit 5 sets of 1/8" or 1/4" scale floor plans showing the proposed carpet layout of all areas to the Engineer for approval. The drawings shall clearly indicate and accurately locate all side seams and binder edgings. Such seams and binder edgings shall conform to the requirements in Subsections 3.02D and 3.02F. Wherever possible, the lay of carpets in adjoining areas shall be in the same direction. Completed work shall conform to the approved drawings.

NOTES TO ARCHITECT

This specification shall not be used unless softness or "plushness" is an absolute necessity.

This specification is for carpet installed with separate underlayment.

Change "15 calendar days" to "7 calendar days" for projects consisting only of carpeting.

Carpeting is a long lead item. Allow 6 to 8 weeks for ordering and delivery of materials when scheduling the project.

2. After receiving the carpeting but before cutting, the Contractor shall submit 2 sets of the above drawings with all proposed cross seams and piece markings (as called for in Subsection 3.02A below) added to the drawings. No cutting shall be done before the Engineer approves this layout.

1.03 TESTING

After delivery of carpet and pad to the job site, the State's Inspector may require that two 9" square swatches of carpet and one of pad be cut from the materials for testing by the State to assure compliance with this specification. Any carpet and/or pad which the tests show does not meet the specifications shall be rejected, and the removal and replacement of such materials shall be done by the Contractor at his own expense.

1.04 GUARANTY

A written guaranty from the Carpet Laying Contractor and countersigned by the Contractor shall be furnished in 4 copies to the Engineer, covering all materials and workmanship for a period of one year from the written date of acceptance of the facility. The guaranty shall cover the correction by the Contractor of any defects in materials or workmanship which occur during the period of guaranty by the repairing or replacing with new material and/or the restretching of the carpet as necessary, all at no cost to the State of Hawaii.

Delete "and countersigned by the Contractor" in projects consisting entirely of carpeting.

PART 2 - PRODUCTS

2.01 MATERIALS

A. <u>Asbestos Prohibition</u>: No asbestos containing materials shall be used under this section. The Contractor shall insure that all materials incorporated in the project are asbestos-free unless specifically approved in writing by the Engineer.

B. <u>Carpet</u>:

1. Components:

- a. Face yarn
 - 1. Minimum 22 oz. per square yard of 100% bulked, continuous filament, second and third generation soil hiding nylon (Antron III, Anso IV, Caltron,

The face yarn wt. shown is for medium traffic areas. It should be

NOTES TO ARCHITECT

Camalon, Zeftron, Spectron, Ultron or approved equal).

increased to 28 oz. for heavy traffic areas such as corridors.

2. Construction

- a. Woven through the back with loop piles.
- b. Pitch: 165 P.O.B.
- c. Rows per inch: 7
- d. Average pile height: .150"
- e. Ply: 4
- 3. Color and pattern: Carpets shall have a pattern with a multiple color tweedy effect. Color shall be as selected from the manufacturer's standard colors. The Engineer may select any 2 of the colors for any building in which carpet is to be installed.

4. Performance

The following flammability requirements shall be met:

<u>TEST</u> <u>RESULT</u>

ASTM E648-78 Radiant 0.22 watts/sq.cm. Panel Test; or

ASTM E84-76a "Steiner Flame spread rating Tunnel Test" of 75 or less

Change to 0.45 watts/sq. cm. for hospitals and health care facilities.

C. <u>Carpet Pad</u>: 68 oz. per square yard minimum, 0.20"-0.25" thickness, flat sponge rubber cushion meeting the following flammability requirements:

TEST RESULT

ASTM E648-78 Radiant 0.22 watts/sq.cm. Panel Test; or

ASTM E84-76a "Steiner Flame spread rating Tunnel Test" of 75 or less

Change to 0.45 watts/sq. cm. for hospitals and health care facilities.

D. <u>Tackless Strip</u>: As manufactured by Roberts, S. Roth, Taylor Industries, or Kinkead, Type E, 7/32" pins. Wood shall be dip treated using Tribucide II at the immersion times noted in the National Wood Window & Door Assn. Standards, NWWDA IS4.

E. <u>Aluminum Binder Edging</u>: Section No. A-121SF as manufactured by Royal Aluminum, Inc., or Section No. 1414 as manufactured by Roberts. Edging shall have hammered finish.

PART 3 - EXECUTION

3.01 INSPECTION OF SURFACES

Before work under this section is started, the Carpet Contractor together with the Contractor and the Engineer shall examine all surfaces that are to receive carpet to ensure that they are in the proper condition for same. The Carpet Contractor shall notify the Contractor of unacceptable areas and/or conditions (in terms of potential damage to the carpet) in writing. A copy of such notification shall be sent to the Engineer. All such areas and/or conditions shall be corrected by the Contractor prior to start of the work.

3.02 INSTALLATION

- A. Every piece of carpeting delivered to the job shall have been marked to indicate its proper location relative to other pieces in the installation. This information shall be written on the back of each piece in indelible ink. A copy of the invoice, which shall have the manufacturer's name, pattern number(s) and color(s) shall be given to the Engineer upon delivery of the materials to the site.
- Modify, delete and/or add to this subsection as appropriate for your project.
- B. All materials shall be installed by a licensed carpet installer.
- C. Floor areas shall be broom cleaned immediately before installation of the pad. Pad shall then be laid smooth and even over the entire area to be carpeted and secured in place with Roberts or equal carpet cement or 3/8" chisel point staples as follows:
 - Concrete or wood floor: A solid strip of cement shall be applied at all edges of pad. Where pieces of pad join, a 12 inch width of cement shall be applied at the seam and minimum 2 inch wide carpet padding tape used over seam area.
 - 2. Wood floor (optional): Pad shall be stapled

at 3 inches o.c. along edges and at seams and minimum 2-inch wide carpet padding tape used over seam areas.

D. Tackless strip shall be installed adjacent to all vertical surfaces. Rooms 30 ft.-0 inches or greater in either dimension shall have commercial 3-row or pairs of 2-row tackless strips. Binder edging shall be installed wherever carpet abuts other exposed flooring material and at other locations if indicated. Carpet strips and the binder edging shall be nailed to wood floors and concrete floor slabs. Binder edging shall be installed in full lengths with joints permitted only where the length of installation exceeds the manufacturer's stock length and/or at changes in direction.

Mitered joints at metal edgings shall be neatly butted together at direction changes with no open gaps.

- E. All the carpet in a given enclosed area shall be matched as closely as possible in color and shade. To achieve this, all the flooring laid in such an area shall be from the same dye lot whenever possible, with pieces laid adjacent to one another in the same order as fabricated.
- F. Carpet shall be laid in full lengths wherever possible, cut and fit evenly to all abutting vertical surfaces, extended into any cabinets which do not have raised bottoms and installed under all movable shelving and casework. The number of side seams and cross seams shall be held to a minimum. Carpet shall be aligned so that lines of carpet match as woven, length and width. Filler strips for any location shall be in one piece. Also:
 - Carpet shall be laid so that seams perpendicular to a wall do not occur at door openings in that wall unless otherwise approved by the Engineer.
 - Carpets in corridors less than 12' wide shall have no more than one seam lengthwise to the corridor and a minimum number of seams across the width of the corridor.
- G. Carpet shall be prepared for seaming as follows:

- 1. Carpet edges at all seams shall be trimmed to match the carpet nap. Pile loops which are frayed in cutting shall be trimmed at the top of the primary backing. However, cutting of pile loops shall be kept to a minimum, and any seam which becomes objectionable because excessive trimming is required shall be rejected.
- A continuous bead of carpet seam adhesive shall be applied along the base of the pile loops adjacent to all cut edges and allowed to dry thoroughly.
- H. Seams shall be made using hot melt tape. Materials and installation shall be as follows:
 - Materials: 4 inch wide hot melt tape with minimum 2-1/2" fiberglass and/or rayon transverse reinforcing loops or strands and 9 longitudinal beaded strips of resin adhesive (Vectron 7510, Roberts 50-300 Series, Taylor #621, Orcon CT-11, Silver Triumph or approved equal.)

2. Installation:

- a. Seaming shall be done by experienced carpet layers capable of producing work in keeping with the acceptable standards in the industry.
- b. Carpet shall be so positioned before seaming that abutting edges form a tight seam when pressed down.
- c. Tape shall be laid centered on the seam.
- d. The heating iron shall have thermostatic heat controls and shall be adjusted to a temperature which will not affect the materials in the carpet selected for this installation.
- e. The hot iron shall be drawn over the tape no faster than is necessary to ensure the complete melting of the resin adhesive (maximum 4 feet per minute). The seam shall be closed immediately behind the iron and pressed flat as needed to ensure uniform bonding and a smooth seam.
- I. Carpet shall be hooked to pins of tackless strip and stretched uniformly a minimum of 1% in

length and width. Lengths over 12 ft. shall be power stretched. Where called for, binder edging shall be clamped down over exposed edges of the carpet.

J. At completion of installation, all dirt and debris shall be cleaned off, all spots shall be removed from the carpet with a proper type of spot remover, and all loose threads shall be snipped from the carpet with a sharp pair of scissors. The entire installation shall be left clean and in a condition acceptable to the Engineer.

END OF SECTION